

**REISSUE PATENT APPLICATION**

**WIRELESS IMAGE TRANSFER FROM A DIGITAL STILL VIDEO CAMERA TO A  
NETWORKED COMPUTER**

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The present invention relates to the field of digital still video cameras (DSVC's). More specifically, one embodiment of the present invention provides for improved storage of images generated by a DSVC. A portable DSVC is convenient for taking pictures at various locations because of the camera's size and weight. Unfortunately, as users have come to expect small weights and compact sizes for consumer electronics, DSVC's have tended to be limited in the number of images which could be stored. One solution to the problem is to add additional memory modules, but this is an expensive solution given that the memory modules must be miniaturized so as not to adversely affect the portability of the DSVC.

What is needed is a DSVC with a large image storage capacity where the image storage is not unduly expensive and does not unreasonably impact the size of the portable camera.

An improved portable image capture system is provided by virtue of the present invention. In one embodiment, a central processing unit (CPU), a modem and a cellular telephone transmitter are coupled to an image memory of a DSV. The CPU is also coupled to a display and a command input device, which might be a voice activated device or a touch screen device integrated with the display. The CPU executes programs as needed to download images through the cellular telephone transmitter to a server station according to a protocol optimized for the connection available. Where the connection is a direct cellular telephone line, data is sent through the cellular telephone transmitter to cellular telephone system and it is received by a modem at the server station. A CPU at the server station directs the file to be stored in a data storage device, which is typically a large-capacity, inexpensive device such as a hard drive.

In variations of the present invention, the server station might perform complex analysis of the received images in order to instruct the DSVC to obtain additional images which the server station determines are needed for the analyses. The analyses include image resolution enhancement, stereoscopic matching, photocopying, and the like, as well as subjective evaluation of camera angle and image compression. In a specific implementation, the server station transmits images back to the remote station for viewing or forwarding to a local facsimile device or digital camera.

A further understanding of the nature and advantages of the inventions herein may be realized by reference to the remaining portion of the specification and the attached drawing.

FIG. 1 is a block diagram of a remote station according to the present invention coupled to a server station via a cellular telephone system.

Referring to FIG. 1, a image transfer system 10 is shown with a remote station 12 coupled to a server station 14 via

Many uses of the present invention are contemplated, some of which are mentioned here, others of which are 65 apparent after reading the disclosure. One use is the collection of vacation photos. Since the remote station is extremely portable, it is convenient for a vacationer to pack

Another use of the present invention is to obtain photocopies in locations, such as libraries, where it is not convenient to bring the item to be copied to a photocopy machine. At photocopier resolutions, a single uncompressed page image might require about 15 megabits of memory (1 bit/pixel  $\times$  400 dpi  $\times$  8.5"  $\times$  11" = 1496 mbit). In order to reduce the memory requirements, the image can be com-

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those skilled in the art upon review of this disclosure. For example, the server station 14 can be either a stationary system or a semi-portable system, so long as it need not be as portable as remote station 12. Also, the remote station 12 might be controlled from server station 14 by allowing remote station 12 to receive command messages from server station 14 over cellular system 16. The scope of the invention should, therefore, be determined not with reference to the above description, but instead should be determined with reference to the appended claims along with their full scope of equivalents.

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